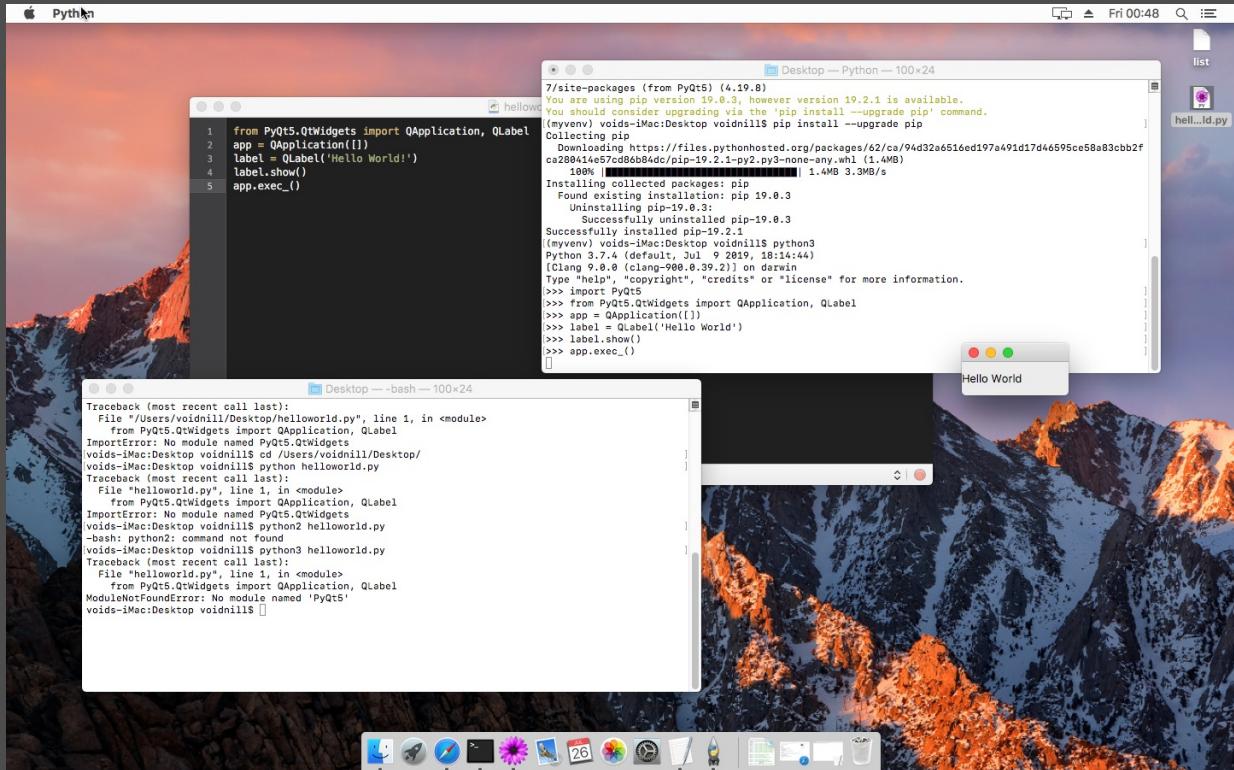


## Annona Glabra (Alligator Apple)

### Preface

A few weeks ago I thought about porting the [Alligator browser](#) to Apple's MacOS system. The considerations became [concrete implementations](#) and now I start this collection of small notes. There are some strong differences at Apple (even if it is based on UNIX), which I don't know from the Linux world. I document these here, so that I have them at hand again if necessary, but also to share my knowledge. I came up with the name because I couldn't think of anything better, so I simply entered Alligator plant into my search engine. The result was [Annona Glabra \(Alligator Apple\)](#).



### venv

There is a problem when you switch to another operating system. You do everything the way you did before. If there is the possibility to work with a terminal and the bash is integrated, everything will be installed the way you know it. It's all a little different with Apple. Since the Alligator browser was developed in Python with PyQt5, I [installed Python 3](#) in the first step. Since there was no error feedback from the system, I thought it would all work. That wasn't the case.

*The version of Python that ships with OS X is great for learning, but it's not good for development. The version shipped with OS X may be out of date from the official current Python release, which is considered the stable production version.*

In the next step I installed PyQt5 with `python3 -m pip install PyQt5`. Also there was no feedback. This is good in the Unix/Linux world. Since I [installed Textmate](#) as editor, I wrote a short hello world script in Python to test if everything works. After compiling I was told that PyQt5 was not present on the system. But? What? I installed it myself for a few minutes and tested it with `PyQt5 --version`. I looked at [another tutorial](#) which also spoke of virtual environments. I hadn't heard of it yet. After reading the article [Virtual Environments and Packages](#), I was able to master the task with my knowledge. Why this works on Linux without it, I haven't completely understood yet, but with `source ~/.virtualenvs/myvenv/bin/activate` you store the current Python project in this created area. PyQt5 is recognized, no problem. At this point I have to say that the package administration universe of Python is terribly confusing.